



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/722,205	11/25/2000	Jamie M. Grooms	TB-104IB	3721

7590 08/30/2004

Donald J. Pochopien
McANDREWS, HELD & MALLOY, LTD.
Citicorp Center, 34th Floor
500 West Madison Street
Chicago, IL 60661

EXAMINER

SNOW, BRUCE EDWARD

ART UNIT	PAPER NUMBER
----------	--------------

3738

DATE MAILED: 08/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/722,205

Applicant(s)

GROOMS ET AL.

Examiner

Bruce E Snow

Art Unit

3738

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 45-66 is/are pending in the application.
- 4a) Of the above claim(s) 46-51, 58, 59, 63 and 64 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 45, 52-57, 60-62, 65-66 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Priority***

It is noted that the elected species shown figures 12A-12D is not supported in USSN 08/920,630, therefore the earliest date for the elected embodiment is the filing date of the PCT/US98/17769 filed 8/27/1998. At least applicant's claim 45 is generic to other embodiments than the elected embodiment and, therefore, has benefit to 8/27/97 filing date.

Response to Arguments

Applicant's arguments filed 7/12/04 have been fully considered.

Regarding the deletion of the previously submitted substitute FIG 12 (FIGs 12A-12F), in response to this action resubmit the original FIG 12 (FIGs 12A-12D thereon) to set the record clear and avoid confusion upon possible allowance.

Applicant's amendment and arguments regarding the Pafford et al references not teaching rows of ribbing angle toward the anterior end of the spacer is persuasive. Regarding new claim 65, applicant is reminded that MPEP 714.02 and 714.04 indicates that applicant must state why a claim is allowable over the prior art of record.

Regarding the Pattord et al reference not teaching "substantially diamond shaped exterior profile", the Examiner notes that the elected embodiment shown in figure 12A has a curved front wall unlike a diamond and has more than four sides unlike a diamond. The Examiner notes that Pattord et al in at least figure 32 teaches a spacer comprising four sides and two obtuse angles 112, 113,

Art Unit: 3738

however, the angles are not diagonal from each other. It is the Examiner's position that this shape is as close to being "substantially diamond external profile" as applicant's elected embodiment. The Examiner further notes figure 24 which has a "substantially diamond external profile".

Regarding the limitation "polygonal", note that figure 32 of Pafford et al is almost identical to applicant's figure 1 which applicant labels "polygonal" by the limitation set forth in claim 58.

Specification/Drawings

The amendment filed 7/12/04 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

"FIG 7A provides FIG 7B provide a side view of a stack embodiment of two implants of FIG 7A of this invention shown in juxtaposition." This amendment was not originally supported. The embodiment shown in figure 7B is not in juxtaposition, it is stacked only.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 3738

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 65 is rejected under 35 U.S.C. 102(e) as being ***clearly anticipated*** by Pafford et al (6,371,988).

Pafford et al teaches numerous embodiments of polygonal cortical spinal spacer. Note figures 29-42 teaching a similar embodiment to applicant's figure 1 which applicant labels "polygonal" by the limitation set forth in claim 58. Also see figures 2 and 24 teaching a "polygonal" spacers. Note at least figures 39 and 40 teaching migration resistant projections.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 45, 52-57, 60-62, and 66 rejected under 35 U.S.C. 103(a) as being unpatentable over Pafford et al (6,371,988) in view of Coates et al (5,888,222).

Pafford et al teaches numerous embodiments of polygonal cortical spinal spacer. Note figures 29-42 teaching a similar embodiment to applicant's figure 1 which applicant labels "polygonal" by the limitation set forth in claim 58. Also see

Art Unit: 3738

figures 2 and 24 teaching a "polygonal" spacers. Note at least figures 39 and 40 teaching migration resistant projections. However, Pattord et al is silent regarding the rows of migration resistant projections angled towards the anterior end of the spacer. Coates et al teaches the migration resistant projection should be angled toward the anterior end to resist anterior migration. See at least column 6, lines 33-58, and figures 13-18. It would have been obvious to one having ordinary skill in the art to have used the teaching of configure the projections such that they are angled in a given direction to prevent migration of the spacer in that direction as taught by Coates et al on any type of migration resistant projection of Pattord et al to better secure the spacer to the vertebrae and better prevent migration of said spacer.

Regarding "flat end", the projects 205 have a planar or flat forward and rearward facet and a vertically flat side end.

See figure 30, teaching beveled edges.

See figures 40-41 teaching both beveled edges and unbeveled edges.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruce E Snow whose telephone number is (703) 308-3255. The examiner can normally be reached on Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott can be reached on (703)308-2111. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3738

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

bes

A handwritten signature in black ink, appearing to read 'Bruce Snow', with a long horizontal line extending to the right.

BRUCE SNOW
PRIMARY EXAMINER